Where Girls Learn Trades

By Lida Rose McCabe

NOTABLE among the exhibits at the Louisiana Purchase exposition is a liberal display from the Manhattan Trade School for Girls of New York, which ranks as the first and only girl's trade school in the United States. This exhibit, covering every kind of work, from that produced by the needle to the elaborate embroidery of the foot and electric-power machines, examples of the expert sample mounter, pocket-books, library desk appointments, note-book covers and novelty boxes, represents the actual daily accomplishment of the school, as shown by the list of articles at hand. There are twelve leaf cabinets for this exhibit, made up of forty mounted frames in which is shown every branch of the academic, art and mechanical work that finds place in shops and factories employing women and children.

Group of Pupils of the New York Trade School

Schools in which girls are taught to make dresses, hats and other wearing apparel are not uncommon, but the strictly "trade" school where different industrial crafts are taught with special reference to their practice in the shops and factories of the country was unknown in America until, over a year ago, this unique institution was established.

It was then that several philanthropic women conceived the idea of such a school, and with voluntary subscriptions as their only funds ventured upon an undertaking which now is proving its usefulness daily. With less than twenty students to register, the founders of this beneficent work opened the school doors in November, 1902, to all girls between the ages of fourteen and seventeen who wished to learn a trade. Since that time the enrollment has reached as high as a hundred forty-five pupils. Many of these have secured employment in factories and shops. The regular course covers a year's instruction.

Tuition is free, and in specially deserving cases financial aid is frequently given. This timely financial aid occasionally prevents a girl's being forced direct from school or home to a shop and thus deprived of the skill that the trade school imparts.

The spirit of this school, one of the points of distinction that give it a place by itself apart from other trade schools, lies in its close application of art to the trades. In this eminently practical age, commercialism has more and more drawn upon art, until the artistic and commercial are so commingled that they form an inseparable unit. Trade now depends surprisingly upon art, and the success of many designs and inventions pertaining to articles of trade resolves itself largely into a question of "lines" and "tones." Have the gown, the hat, the book cover, the lamp shade, the correct "lines"? Are the decorations and trimmings proportionate? Are balance and symmetry preserved? And do the colors harmonize? Are they in accordance with the laws governing color combinations?

It is only necessary to visit the art rooms of the school to understand the use and application of art in trade. For example, when a student enters the school, her initiation into the art department consists of lessons in "lines." She is instructed in surface and border patterns shown in historic ornament, and on calico, silk and woolen stuffs. In connection with this study, she is sent to the machine operating room where she quilts a machine apron in horizontal, vertical and oblique lines. If her chosen trade is dressmaking (each girl selects a trade after a month's apprenticeship), she is further taught the application of lines in shirring, cross-stitch collars and cuffs, and shirt-waist plaits; or, if her choice leads her to sample mounting and the allied trades in the pasting department, she is educated in the making of borders on sample book covers and sample cards.

In the same way, "variety and consistency," illustrated by ribbons, dimities, Scotch plaids and the division of dress as related to the human figure, are taught; also, the Greek law of "less than one-half and more than one-third division" is dwelt upon in the teaching of the proper length of yokes, the arrangement of trimmings on skirts, and the proper placing of verses and letters upon sample books. "Balance," too, is another art principle that receives special attention, being well illustrated by the cosmos doily, the pasting of samples in sample books, or the arrangement of monograms on the covers. In developing the idea of balance, the flower, for instance, is first sketched from nature, then conventionalized, and lastly applied to some article of utility or dress.

But, in no case is stress laid upon the matter of designing. The short course prescribed by the school would not permit of thorough training in that broad field of art. The aim of the art course is simply the presentation of art principles in order to inculcate an appreciation of good art while also giving the student the ability to apply those principles for trade uses.

A girl often goes to the trade school intent upon learning millinery or dressmaking, when it is discovered after months of probation that her taste is more for embroidery or machine operating. Exceptionally clever was a girl of fourteen who was bent upon becoming a dressmaker. After several months' trial she was pronounced impossible. Sent back to the art department, where she had given promise, she soon developed unmistakable talent for sketching, and is now making rapid strides in reproducing in ink or pencil gowns and other wearing apparel made in the dressmaking department. There is a large demand for skilled women to illustrate trade journals and merchants' catalogues, which the trade school seems destined to put girls in the way of supplying.

One of the Departments Where Women become Skilled

Where a pupil has the wit to grasp construction, she is put in charge of a class and prepares work for the others. From this class will graduate the forewomen of the skilled factory women of the future.

In the machine operating room, on either side of a long table are found numerous makes of machines. Through the middle of the table is a trough to catch the finished work as it falls from the operator. The pupil begins at the head of the table, and after a month's apprenticeship passes to the next machine, until all have been mastered, making her capable of meeting the machine requirements of any factory or shop.

An electric-power machine makes thirty-three hundred stitches a minute. To lose a minute through breakage of thread, needle, or other mechanical defect is loss to the employer as well as employe. The pupil is taught how to avoid or meet such contingency, thus obviating the necessity of sending for a mechanic, as is the custom in factories where unskilled operators are employed.

To meet the demand, inventive skill is ever on the alert. From general operating, a pupil soon settles on a special machine confining her efforts to buttonholing, hemstitching, ruffling, tucking, binding, braid or silk embroidering, for each of which there is a machine that turns out work to baffle the connoisseur, so skilful is the imitation of hand labor. A girl of fifteen after several months' apprenticeship is able to braid or embroider, on an electric-power machine carrying six different colors of braid or silk, a turned-over collar in a conventionalized design, without the latter being stamped upon the material. She carries the design in her brain, and with her hand guides the electric needle as does the painter his brush, and completes the whole from start to finish without stopping the machine.

"The attitude of shop and factory owners toward the trade school is upon the whole most friendly," said an official. "Two of the largest millinery establishments in Philadelphia send us gratis materials more costly than we could afford to buy for use in our classes. Many shops where our girls have found work send to us constantly for more help, and we have difficulty in making them understand that it is impossible for us to turn out skilled rather than machine-made girls within a given time. It depends almost wholly upon individual aptitude and industry. In rush seasons many makers of women's and children's neckwear send for us to help them out."

There is another mark of distinction that belongs only to this unique school: A thorough course in industrial history is given, which treats not of wars and political scheming, but of the manufacture of cloth and other fabrics, of importations and their effect upon domestic productions. Talks are given on clubs and guilds and strikes, the aim of it all being to awaken an interest in the trade in which the girl is engaged, "that she may understand her relation to it and its relation to the industrial world."

Another novel feature of the school is the pasting department, in which all matters pertaining to the mounting of samples and the making of sample book covers are taught. There are six or eight methods of displaying the merchants' goods exhibited, and besides the acquirement of neatness and accuracy in pasting these scraps of cloth upon the pasteboard it is also necessary to develop speed. Some of the books hold five hundred fifty samples, and in the shops where this work is done the most rapid manipulators of the paste brush make four and five books in a day. It is said to the credit of the school that many of the girls have made this record in their work.

It is in the pasting department also that the novelty boxes, note-book covers and desk articles are made, illustrating the endless variety of uses in which the principles of the work may be employed. And, as in all the departments of the school, pasting lessons are co-related with art and the academic course.